Accident. An unexpected or undesirable event. In this context, accidents may lead to the release of hazardous material within a facility or into the environment, exposing workers or the public to hazardous materials or radiation.

Accord Pueblos. Four Pueblos that have each executed formal accord documents with the DOE setting forth the government-to-government relationship between each of the Pueblos and the DOE. The four Pueblos are Cochiti, San Ildefonso, Santa Clara, and Jemez.

Advisory Council of Historic Preservation (Council). An independent 19-member Federal council created by the *National Historic Preservation Act* of 1996, Title II (16 United States Code [U.S.C.] §470 et seq.). Under Section 106, the Council must be afforded the opportunity to comment on undertakings that affect National Register of Historic Places (NRHP)-eligible properties.

Air pollutant. Any substance in air that could, if in high enough concentration, harm humans, other animals, or vegetation.

Air quality standards. The level of "criteria" pollutants in the air prescribed by regulations that may not be exceeded during a specified time in a defined area.

Ambient air. That portion of the atmosphere, external to buildings, to which the general public is exposed.

Aquifer. Rock or sediment in a formation, group of formations, or part of a formation that is saturated and sufficiently permeable to conduct groundwater.

Archaeological sites (resources). Any location where humans have altered the terrain or left material remains (artifacts) during prehistoric or historic times.

Artifact. An object of archaeological or historical interest produced or shaped by human workmanship.

Atomic Energy Commission. A five-member commission, established by the *Atomic Energy Act* of 1946, to supervise nuclear weapons design, development, manufacturing, maintenance, modification, and dismantlement. In 1974, the Atomic Energy Commission was abolished and all functions were transferred to the U.S. Nuclear Regulatory Commission and the Administrator of the Energy Research and Development Administration. The Energy Research and Development Administration was later terminated and its functions vested by law in the Administrator were transferred to the Secretary of Energy.

Background radiation. Radiation from (1) naturally occurring radioactive materials that have not been technologically enhanced, (2) cosmic sources, (3) global fallout as it exists in the environment (such as from the testing of nuclear explosive devices), (4) radon and its progeny in concentrations or levels existing in buildings or the environment that have not been elevated as a result of current or past human activities, and (5) consumer products containing nominal amounts of radioactive material or producing nominal levels of radiation (10 Code of Federal Regulations [CFR] 835.2).

Baseline. A quantitative expression of conditions, costs, schedule, or technical progress to serve as a base or standard for measurement during the performance of an effort; the established plan against which the status of resources and the progress of a project can be measured. For the CT EIS, the environmental baseline is the site environmental conditions that are considered representative for the purpose of projecting future impacts.

Beryllium. An extremely lightweight and strong metal used in weapons systems.

Biota. Living organisms, including plants and animals.

Bounding. A credible upper limit to consequences or impacts.

Bounding analysis. An analysis designed to overestimate or determine an upper limit to potential impacts or risks.

"Bound the impacts." The use of assumptions and analytical methods in an analysis of impacts or risks such that the result overestimates or describes an upper limit on ("bounds") potential impacts or risks.

Caldera. A large crater formed by the collapse of the central part of a volcano.

Cancer. The name given to a group of diseases characterized by uncontrolled cellular growth with cells having invasive characteristics such that the disease can transfer from one organ to another.

Capability. The combination of equipment, facilities, infrastructure, and expertise required to undertake types or groups of activities and implement mission element assignments.

Capacity. The maximum hourly rate at which vehicles can reasonably be expected to traverse a point or uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions

Cavate Pueblo. Structure making use of natural rock to form the sides of a single structure or group of buildings, frequently by hollowing out the interior space.

Cesium. A silver-white alkali metal. A radioactive isotope of cesium, cesium-137, is a common fission product.

Climatology. The characteristics of the weather over a period of time. The science of climatology addresses the causes, distribution,

and effects of weather on the environment and humans.

Code of Federal Regulations (CFR). All Federal regulations in force are published in codified form in the Code of Federal Regulations.

Cold War period. The historic period from 1949 to 1989, characterized by international tensions and nuclear armament buildup, especially between the United States and the U.S.S.R. The era began approximately at the end of World War II when the *Atomic Energy Act* was passed, establishing the Atomic Energy Commission, and ended with the dissolution of the U.S.S.R. into separate republics and the ending of large-scale nuclear weapons production in the United States.

Collective dose. The sum of the total effective dose equivalent (TEDE) values of all individuals in a specified population. Collective dose is expressed in units of person-rem (or person-sievert) (10 CFR 835).

Collector street. The collector street system provides both land access service and traffic circulation within residential neighborhoods and commercial and industrial areas

Community (biotic). All plants and animals occupying a specific area and their relationships.

Consideration. A contract term in real estate defined as that which is received by the grantor in exchange for his or her deed; something of value that induces a person to enter into a contract. Consideration is most commonly given in the form of currency.

Contamination. The deposition or discharge of chemicals, radionuclides, or particulate matter above a given threshold, usually associated with an effects level onto or into environmental media, structures, areas, objects, personnel, or nonhuman organisms.

Convey. As used in this CT EIS, refers to the disposition of land parcels away from Federal Government Ownership.

Cooperating Agency. As defined by the Council on Environmental Quality regulations for implementing the NEPA, any Federal agency other than a lead agency that has jurisdiction by law of special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action. The selection and responsibilities of a Cooperating Agency are described in 40 CFR §1501.6. A State or local agency of similar qualifications or, when the effects are on a reservation, a Native American tribe, may by agreement with the lead agency become a Cooperating Agency (40 CFR 1508.5).

Credible accident. An accident that has a probability of occurrence greater than or equal to once in a million years.

Criteria of adverse effect. Regulations in 36 CFR Parts 800.5(a)(1) and 800.9(b) and Section 106 of the *National Historic Preservation Act* (16 U.S.C. §470 *et seq.*) that provide guidelines for determining the kind and intensity of effect to an NRHP-eligible cultural resource.

Criteria pollutant. Six air pollutants for which National Ambient Air Quality Standards are established by the U.S. Environmental Protection Agency: sulfur dioxide, nitric oxides, carbon monoxide, ozone, particulate matter-10 (smaller than 10 microns in diameter), and lead.

Cultural resource site. The specific place or location of regular human occupation or use.

Cultural resources survey. A systematic inventory of an area to identify cultural resources.

Cultural resources. Cultural resources are those aspects of the physical environment that relate to human culture and society, and those cultural institutions that hold communities together and link them to their surroundings.

Cultural resources include expressions of human culture and history in the physical environment such as prehistoric or historic sites, buildings, structures, objects, districts, or other places including natural features and biota which are considered to be important to a culture, subculture, or community. Cultural resources also include traditional lifeways and practices, and community values and institutions.

Cumulative impacts. The impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal), private industry, or individuals undertake such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time (40 CFR 1508.7).

Debitage. The refuse flakes created when stone tools are manufactured.

Decay (radioactive). The decrease in the amount of any radioactive material with the passage of time, due to the spontaneous transformation of an unstable nuclide into a different nuclide or into a different energy state of the same nuclide; the emission of nuclear radiation (alpha, beta, or gamma radiation) is part of the process.

Decibel, A-weighted (dBA). A unit of weighted sound pressure level measured by the use of a metering characteristic and the "A" weighting specified by the American National Standards Institute (S1.4-1971[R176]).

Decibel (**dB**). A unit of sound measurement. In general, a sound doubles in loudness for every increase of 10 decibels.

Decommissioning. As used in the CT EIS, the process of decontamination, disassembly, and storage or disposal in a manner and state that assures future exposure of humans and the environment would be at acceptable levels.

Decontamination. The removal or reduction of radioactive or chemical contamination from facilities, equipment, or soils by washing, heating, chemical or electrochemical action, mechanical cleaning, or other techniques.

Deposition. In geology, the laying down of potential rock-forming materials (sedimentation). In atmospheric sciences, the collection and retention of airborne particulates of gases on any solid or liquid surface (called dry deposition), or their removal from the air by precipitation (called wet deposition or precipitation scavenging).

Dispersion. The downwind spreading of a plume by turbulence and meander in wind direction, resulting in a plume of lower concentration over a larger area.

Disposal. The process of placing waste in a final repository.

Distance zones. The relative visibility from travel routes or observation points.

DOE orders. DOE directives that promulgate requirements and policies to DOE employees and contractors, including requirements to comply with other laws and regulations.

Dose (or radiation dose). The amount of energy deposited in body tissue as a result of radiation exposure. Various technical terms, such as absorbed dose, collective dose, dose equivalent, and effective dose equivalent, are used to evaluate the amount of radiation an exposed person receives. Each of these terms is defined in this glossary.

Dose equivalent. The product of absorbed dose in rad (or gray) in tissue, a quality factor, and other modifying factors. Dose equivalent is expressed in units of rem (or sievert) (1 rem = 0.01 sievert) (10 CFR 835.2).

Dosimeter. A device, instrument, or system that measures radiation dose (for example, film badge or ionization chamber).

Drawdown. The height difference between the natural water level in a formation and the

reduced water level in the formation caused by the withdrawal of groundwater.

Drinking-water standards. The prescribed level of constituents or characteristics in a drinking water supply that cannot be exceeded legally.

Ecosystem. Living organisms and their nonliving (abiotic) environment functioning together as a community.

Ecotone. Transition zone between two adjacent distinct plant or animal communities.

Effective dose equivalent (EDE). The summation of the products of the dose equivalent received by specified tissues or organs of the body and the appropriate weighting factor. It includes the dose from radiation sources internal and/or external to the body. The effective dose equivalent is expressed in units of rem (or sievert) (10 CFR 835.2).

Effluent. Liquid or gaseous waste streams discharged into the environment.

Eligible cultural resource. A cultural resource that has been evaluated and reviewed by an agency and the State Historic Preservation Office(r) and recommended as eligible for inclusion in the National Register of Historic Places, based on the criteria of significance.

Eligible properties. Eligible properties (or historic properties) are cultural resources that meet the requirements for listing on the National Register of Historic Places (NRHP). The effects of Federal actions on eligible properties must be assessed by agencies, and consultation is required to avoid, reduce, or minimize adverse effects.

Emission standards. Legally enforceable limits on the quantities and/or kinds of air contaminants that can be emitted into the atmosphere.

Endangered species. Plants and animals or other living organisms in danger of extinction by human-produced or natural changes in

their environment. Requirements for declaring a species endangered are contained in the *Endangered Species Act* of 1973.

Environmental assessment (EA). A written environmental analysis that is prepared pursuant to the *National Environmental Policy Act* to determine whether a major Federal action could significantly affect the environment and thus require preparation of an environmental impact statement. If the action would not significantly affect the environment, then a finding of no significant impact is issued.

Environmental impact statement (EIS). A document required of Federal agencies by the *National Environmental Policy Act* for proposals for legislation or major Federal actions significantly affecting the quality of the human environment. A tool for decision making, it describes the positive and negative environmental impacts of the proposed action and alternative actions.

Environmental justice. A requirement of Executive Order 12898 for Federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental impacts of Federal programs, policies, and activities on minority or low-income populations.

Environmental monitoring. The process of sampling and analysis of environmental media in and around a facility being monitored for the purpose of (1) confirming compliance with performance objectives and (2) early detection of any contamination entering the environment to facilitate timely remedial action.

Ephemeral stream. A stream that flows only after a period of heavy precipitation.

Epicenter. The point on the Earth's surface directly above the focus of an earthquake.

Epidemiology. The science concerned with the study of events that determine and influence the frequency and distribution of disease, injury, and other health-related events

and their causes in defined human populations.

Ethnographic. Information about cultural beliefs and practices.

Exposure limit. The legal limit of accumulated exposure (to ionizing radiation, nonionizing radiation, noise, chemicals, or other hazardous substances).

Fault. A fracture or a zone of fractures within a rock formation along which vertical, horizontal, or transverse slippage has occurred.

Fee title. A contract term in real estate that means the holder is entitled to all rights incident to the property. There are no time limitations on its existence (it is said to run forever). The ownership of the land by a fee holder is complete and free of State domination (except the rights of the State of taxation, police power, and eminent domain).

Finding of no significant impact (FONSI).

A document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded, will not have a significant effect on the human environment and will not require an environmental impact statement.

Formation. In geology, the primary unit of formal stratigraphic mapping or description. Most formations possess certain distinctive features.

Fugitive emissions. Emissions to the atmosphere from pumps, valves, flanges, seals, and other process points not vented through a stack. Also includes emissions from area sources such as ponds, lagoons, landfills, and piles of stored material.

Geology. The science that deals with the Earth, the materials, processes, environments, and history of the planet, including the rocks and their formation and structure.

Groundwater. Water below the ground surface in a zone of saturation.

Hazardous material. A material, including a hazardous substance, as defined by 49 CFR 171.8 that poses a risk to health, safety, and property when transported or handled.

Hazardous waste. A solid waste that, because of its quantity, concentration, or physical chemical or infectious characteristics, may significantly contribute to an increase in mortality; or may pose a potential hazard to human health or the environment when improperly treated, stored, or disposed. The *Resource Conservation and Recovery Act* (RCRA) defines a "solid" waste as including solid, liquid, semisolid, or contained gaseous material (42 U.S.C. 6901 *et seq.*). By definition, hazardous waste has no radioactive components.

Historic context. A planning unit that is based on a shared theme, specific time period, and/or geographical area. Historical contexts are developed for predicting the types of cultural resources that may be present, the activities that may have taken place in the area, and determining the role individual cultural resources played in expressing or demonstrating the shared theme, time period, and/or geographic area. The evaluation process uses the historic context to identify data deficits and to determine the relative significance of particular cultural resources.

Historic district. A significant concentration, linkage, or continuity of sites, buildings, structures, or objects historically or aesthetically united by plan or physical development and eligible for inclusion in the National Register of Historic Places because of cultural significance.

Historic properties. Historic properties (or eligible properties) are cultural resources that meet specific criteria for eligibility for inclusion in the National Register of Historic Places (NRHP). The effects of Federal actions on historic properties must be assessed by agencies and consultation is required to avoid, reduce or minimize adverse effects.

Historic resources. Historic resources include the material remains and landscape alterations that have occurred since the arrival of Europeans in the region.

Homesteaders. A person or people who settle in an area of wilderness; an individual who settles on U.S. public land by filing a record and living on and cultivating the land under the homestead law; a person who establishes a colony or settles as a colonist in a new area.

Hunter-gatherers. A nomadic way of life where small bands of people exploit plant and animal resources sequentially, following seasonal availability.

Hydrology. The science dealing with the properties, distribution, and circulation of water on and below the Earth's surface and in the atmosphere.

Infrastructure. The basic services, facilities, and equipment needed for the functioning and growth of an area.

Integrity. Integrity is an assessment of the authenticity and survival of physical characteristics that existed during the property's period of significance. In order for a property to be eligible for listing on the National Register of Historic Places, the resource must retain most, if not all, aspects of integrity: location, design, setting, workmanship, material, and association.

Interim (permit) status. Period during which treatment, storage, and disposal facilities coming under the *Resource Conservation and Recovery Act* of 1980 are temporarily permitted to operate while awaiting denial or issuance of a permanent permit.

Ionizing radiation. Radiation with sufficient energy to displace electrons from atoms or molecules, thereby producing ions.

Isotope. Nuclei of the same element with different numbers of neutrons are isotopes of the element. Isotopes have the same chemical properties but may have different radioactive properties.

Latent cancer fatality (LCF). Death from cancer resulting from, and occurring some years after, exposure to excess ionizing radiation or other carcinogens.

Level of service (LOS). A qualitative measure that characterizes operational conditions within a traffic stream and the perception by motorists and passengers of conditions. Six levels of service are defined, from LOS A, representing the best operating conditions to LOS F, the worst.

Lithic scatter. Concentrations of stones showing evidence of human manufacturing of stone tools, including finished artifacts, roughly formed artifacts, the cores of stone from which they were made, and the waste flakes from the tool manufacturing process.

Lithic. Stone, rock.

Local street. A local street primarily permits direct access to abutting lands and connections to higher order systems (collectors and arterials).

Low-income population. Community in which 25 percent or more of the population is characterized as living in poverty. The CT EIS uses the U.S. Bureau of the Census 1990 data to establish poverty thresholds; the 1990 poverty threshold for unrelated individuals was a 1989 income of \$6,451 for those under age 65; \$5,947 for those age 65 and older; and \$12,674 for a family of four.

Low-level radioactive mixed waste (LLMW). Waste that contains both hazardous and low-level radioactive components. The hazardous component in LLMW is subject to regulation under the RCRA.

Low-level radioactive waste (LLW). All radioactive waste that is not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or "11e(2) by-product material" as defined by DOE Order 5820.2A, Radioactive Waste Management. By-product material includes tailings or waste produced by the extraction or concentration of

uranium or thorium from any ore processed primarily for its source material content. Test specimens of fissionable material irradiated for research and development only, and not for the production of power or plutonium, may be classified as low-level radioactive waste, provided that the concentration of transuranic waste is less than 100 nanocuries per gram.

Major arterial. Major arterials are roads that serve the major centers of activity, the highest traffic volume corridors, and the longest trips.

Maximally exposed individual (MEI). A hypothetical person whose location and habits result in the highest concentration or exposure and who takes no protective actions to lessen his or her exposure.

Meteorology. The science dealing with the atmosphere and its phenomena, especially as relating to weather.

Migration. The natural movement of a material through the air, soil, or groundwater; also, seasonal movement of animals from one area to another.

Migratory Bird Treaty Act. This act states that it is unlawful to pursue, take, attempt to take, capture, possess, or kill any migratory bird, or any part, nest, or egg of any such bird other than permitted activities.

Minority population. Area where minority individuals comprise 25 percent or more of the population. Minority refers to people who classified themselves in the 1990 U.S. Census as African Americans, Asian or Pacific Islanders, Native Americans (American Indians), Hispanics of any race or origin, or other non-White races.

Mitigation. The alleviation of adverse impacts on resources by avoidance, by limiting the degree or magnitude of an action, by repair or restoration, by preservation and maintenance that reduces or eliminates the impact, or by replacing or providing substitute resources or environments.

Mixed waste. See low-level radioactive mixed waste.

National Ambient Air Quality Standards (NAAQS). Air quality standards established by the *Clean Air Act*, as amended. The primary NAAQS are intended to protect the public health with an adequate margin of safety, and the secondary NAAQS are intended to protect the public from any known or anticipated adverse effects of a pollutant.

National Environmental Research Park.

An outdoor laboratory set aside for ecological research to study the environmental impacts of energy developments. National environmental research parks were established by the DOE to provide protected land areas for research and education in the environmental sciences and to demonstrate the environmental compatibility of energy technology development and use.

National Pollutant Discharge Elimination System (NPDES). Federal permitting system required for hazardous effluents regulated through the *Clean Water Act*, as amended.

National Pollutant Discharge Elimination System Permit. Federal regulation (40 CFR Parts 122 and 125) requires permits for the discharge of pollutants from any point source into the waters of the United States regulated through the *Clean Water Act*, as amended.

National Register of Historic Places (NRHP). A list of districts, sites, buildings, structures, and objects of prehistoric or historic local, state, or national significance maintained by the Secretary of the Interior. The list is expanded as authorized by Section 2(b) of the *Historic Sites Act* of 1935 (16 U.S.C. §462) and Section 101(a)(1)(A) of the *National Historic Preservation Act* of 1966, as amended.

NRHP eligibility. The criteria of significance in American history, architecture, archeology, engineering, and culture. The criteria require integrity and association with lives or events, distinctiveness for any of a variety of reasons,

or importance because of information the property does or could hold.

Native American. A tribe, people, or culture that is indigenous to the United States. Also referred to as American Indians.

Natural event accidents. Accidents that are initiated by events such as earthquakes, tornadoes, floods, etc.

Noise. Unwanted or undesirable sound, usually characterized as being so loud as to interfere with, or be inappropriate to, normal activities such as communication, sleep, study, or recreation.

Nonattainment area. An air quality control region (or portion thereof) in which the EPA has determined that ambient air concentrations exceed National Ambient Air Quality Standards (NAAQS) for one or more criteria pollutants.

Noncriteria pollutant. A pollutant with an effects screening level guideline. Some noncriteria pollutants have a state standard as well.

Offsite. As used in the CT EIS, the term denotes a location, facility, or activity occurring outside of the boundary of the entire LANL site.

Onsite. As used in the CT EIS, the term denotes a location or activity occurring somewhere within the boundary of the LANL site.

Outfall. The discharge point of a drain, sewer, or pipe as it empties into a body of water.

Paleontological resources. Fossils, including those of microbial, plant, or animal origin.

Paleontology. A science dealing with life of past geological periods as known from fossil remains.

Perched aquifer. Groundwater separated from the underlying main body of groundwater, or aquifer, by unsaturated rock.

Perched groundwater. A body of groundwater of small lateral dimensions lying above a more extensive aquifer.

Perennial. Acting or lasting throughout the year or through many years (perpetual).

Permeability. The degree to which or rate at which a fluid or gas can pass through a substance.

Person-rem. A redundancy meaning a dose of 1 rem. When used with a collective dose or population dose, it is a unit for expressing the dose when integrated across all people in the population.

Physical setting. The land and water form, vegetation, and structures that compose the landscape.

Plume. The elongated pattern of contaminated air or water originating at a point source, such as a smokestack or a hazardous waste disposal site.

Plutonium. A heavy, radioactive, metallic element with the atomic number 94. It is produced artificially in a reactor by bombardment of uranium with neutrons and is used in the production of nuclear weapons.

Pollution prevention. Involves recycling or reduction of any hazardous substance, pollutant, or contaminate before generation, along with practices that protect natural resources through conservation or more efficient use.

Population dose. See "collective dose."

Potable. Suitable for drinking.

Potential release site (PRS). Areas that have been designated by the LANL Environmental Restoration Project as having actual, suspected, or potential releases of contamination.

Prehistoric resources. Prehistoric cultural resources refer to any material remains, structures, and items used or modified by people before the establishment of a European

presence in the upper Rio Grande Valley in the early 17th Century.

Programmatic environmental impact statement (PEIS). A broad-scope EIS prepared in accordance with the requirements of 102(2)(C) of the NEPA that analyzes the environmental impacts of proposed Federal policies or programs that involve multiple decisions potentially affecting the environment at one or more sites.

Project-specific environmental impact statement. An EIS prepared in accordance with the requirements of 102(2)(C) of the NEPA that evaluates the environmental impacts of a single proposed action. See "Environmental impact statement."

Protected area. An area encompassed by physical barriers, subject to access controls, surrounding material access areas, and meeting the standards of DOE Order 5632.1C, Protection and Control of Safeguards and Security Interests.

Pueblo. The communal dwelling of a Native American village of Arizona, New Mexico, or adjacent areas, consisting of contiguous flatroofed stone or adobe houses in groups, sometimes several stories high; a Native American village of the southwestern United States; a member of a group of Native American people of the southwestern United States.

Rad. See "Radiation absorbed dose."

Radiation absorbed dose (rad). The basic unit of absorbed dose equal to the absorption of 0.01 joule per kilogram of absorbing material.

Radiation. As used in the CT EIS, means ionizing radiation. The emitted particles or photons from the nuclei of radioactive atoms.

Radioactive waste. Materials from nuclear operations that are radioactive or are contaminated with radioactive materials, and for which use, reuse, or recovery are impractical.

Radioactive. The state of emitting radiation energy in forms of waves (rays) or particles.

Radioactivity. The spontaneous decay or disintegration of unstable atomic nuclei accompanied by the emission of radiation.

Radioisotopes. See "Isotope."

Radionuclide. Any radioactive element.

Radon. A heavy gaseous, radioactive element with a half life of about 4 days from the decay of radium.

Raptor. Birds of prey including various types of hawks, falcons, eagles, vultures, and owls.

Recharge. Replenishment of water to an aquifer.

Record of decision (ROD). A document prepared in accordance with the requirements of 40 CFR 1505.2 that provides a concise public record of the DOE's decision on a proposed action for which an EIS was prepared. A ROD identifies the alternatives considered in reaching the decision, the environmentally preferable alternative(s), factors balanced by the DOE in making the decision, whether all practicable means to avoid or minimize environmental harm have been adopted, and if not, why they were not.

Region of influence (ROI). Region in which the principal direct and indirect socioeconomic effects of actions are likely to occur and are expected to be of consequence for local jurisdictions.

Reliability. The ability of a nuclear weapon, weapon system, or weapon component to perform its required function under stated conditions for a specified period of time (essentially equivalent to performance).

Rem (Roentgen equivalent man). The conventional unit or radiation dose equivalent. A unit of individual dose of absorbed ionizing radiation used to measure the effect on human tissue. The dosage of an ionizing radiation that will cause the same

biological effect as one roentgen of x-ray or gamma-ray exposure.

Remediation. Remediation is defined as the process of remedying a site where a hazardous substance release has occurred. Remedial actions (most often concerned with contaminated soil and groundwater, and decontamination and decommissioning) are responsibilities of the LANL Environmental Restoration Project.

Restoration. Restoration is defined as the assessment and cleanup of both contaminated (radioactive and/or hazardous substances) DOE-owned facilities in use and of DOE sites that are no longer a part of active operations.

Risk assessment (chemical or radiological). The qualitative and quantitative evaluation performed in an effort to define the risk posed to human health and/or the environment by the presence or potential presence and/or use of specific chemical or radiological materials.

Risk. A quantitative or qualitative expression of possible loss that considers both the probability that a hazard will cause harm and the consequences of that event.

Roentgen equivalent man (rem). See "Rem."

Roentgen. A unit of exposure to ionizing x-ray or gamma radiation equal to 2.58 x 10⁻⁴ coulomb per kilogram. (A coulomb is a unit of electrical charge.) A roentgen is approximately equal to 1 rad.

Runoff. The portion of rainfall, melted snow, or irrigation water that flows across the ground surface and may eventually enter streams.

Sanitary wastes. Liquid or solid (includes sludge) wastes that are not hazardous or radioactive and that are generated by industrial, commercial, mining, or agricultural operations or from community activities.

Scenic class. A scenic class represents the relative value of visual resources and provides a basis for considering visual values during

the site planning process. Class I represents very high public value. Class II represents high public value. Class III represents a moderate public value. Class IV is considered to be of low public value.

Scenic quality. The measure of the visual appeal of a tract of land. Scenic quality is the measure of the visual appeal of a tract of land, which is determined using seven key factors: landforms, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications.

Scope. In a document prepared pursuant to the NEPA, the range of actions, alternatives, and impacts to be considered.

Scoping. Involves the solicitation of comments from interested people, groups, and agencies at public meetings, public workshops, in writing, electronically, or via fax to assist the DOE in defining the proposed action, identifying alternatives, and developing preliminary issues to be addressed in an environmental impact statement.

Section 106 process. A National Historic Preservation Act (16 U.S.C. §470 et seq.) review process used to identify, evaluate, and protect cultural resources eligible for nomination to the National Register of Historic Places that may be affected by Federal actions or undertakings.

Sedimentation. The settling out of soil and mineral solids from suspensions under the force of gravity.

Seismic zone. Geographic region that is assumed to possess uniform earthquake potential throughout.

Seismic. Pertaining to any earth vibration, especially an earthquake.

Seismicity. Occurrence of earthquakes in space and time.

Sensitivity levels. The measure of public concern for scenic quality.

Setting. The physical environment of a property.

Settlement patterns. The distribution of archaeological sites within a given geographical region, arranged by cultural conditions or environmental necessity.

Severe accident. An accident with a frequency rate of less then 10^{-6} per year that would have more severe consequences than a design-basis accident, in terms of damage to the facility, offsite consequences, or both.

Sewage. The total of organic waste and wastewater generated by an industrial establishment or a community.

Site-wide environmental impact statement (**SWEIS**). A type of programmatic EIS that analyzes the environmental impacts of all or selected functions at a DOE site. As part of its regulations for implementation of the NEPA, the DOE prepares site-wide EISs for certain large, multiple-facility DOE sites; it may prepare EISs or EAs for other sites to assess the impacts of all or selected functions at those sites (10 CFR 1021.330[c]).

Socioeconomics. The social and economic condition in the study area.

Solid waste management unit (SWMU). Any unit from which hazardous constituents may migrate, as defined by the *Resource Conservation and Recovery Act*. A designated area that is or is suspected to be the source of a release of hazardous material into the environment that will require investigation and/or corrective action.

Source term. The quantity of material released and parameters (such as exhaust temperature) that determine the downwind concentration, given a specific meteorological dispersion condition.

Species of concern. Includes species that are considered to be potential candidates for addition to the List of Endangered Species (50 CFR 17) by the Federal agency responsible for *Endangered Species Act* compliance oversight, the U.S. Fish and Wildlife Service. These are primarily species for which there is insufficient information on

biological vulnerability and threat to warrant legal protection.

State Historic Preservation Office(r) (SHPO). A position in each U.S. state that coordinates state participation in the implementation of the *National Historic Preservation Act* (16 U.S.C. §470 *et seq.*). The SHPO is a key participant in the Section 106 process, reviewing the identification of eligible resources and evaluation of effects of undertakings, and assisting in the development of mitigation measures or management plans to reduce any adverse effects to eligible cultural resources.

Strike. The direction or trend that a structural surface (for example, a bedding or fault plane) takes as it intersects the horizontal.

Surface water. Water on the Earth's surface, as distinguished from water in the ground (groundwater).

Threatened species. Animals, plants, or other living organisms threatened with extinction, serious depletion, or destruction of critical habitat by human-produced or natural changes in their environment. Requirements for declaring species threatened are contained in the *Endangered Species Act* of 1973.

Total effective dose equivalent (TEDE).

The sum of the effective dose equivalent from external exposures and the committed effective dose equivalent from internal exposures (10 CFR 835).

Toxic waste. Individual chemical wastes (liquid or solid), such as polychlorinated biphenyls or asbestos, that are regulated by the *Toxic Substances Control Act*.

Traditional cultural properties (TCPs).

Traditional cultural properties are places associated with the cultural practices or beliefs of a living community. These sites are rooted in the community's history and are important in maintaining cultural identity.

Traditional lifeways. The religious, social, economic, or institutional aspects of a group's

life that have been passed on and continued through time.

Transfer. As used in this CT EIS, refers to the disposition of land parcels to another Federal Government agency, with the retention of ownership by the Federal Government.

Tritium. A radioactive isotope of the element hydrogen with two neutrons and one proton. Common symbols for the isotope are H–3 and T.

Undetermined resources. Undetermined resources are those for which eligibility for listing on the NRHP cannot be determined based on current knowledge of the resource and where further work is needed to make an evaluation. Resources that may be present in an area but that have not been identified, including buried archaeological sites, buildings or structures, and TCPs also are undetermined resources. Undetermined resources are treated as eligible until a formal evaluation is completed.

Visual Resource Inventory Class. Scenic quality, distance zones, and sensitivity levels combine to establish Visual Resource Inventory Classes, which in turn provide the basis for considering visual values and objectives in the planning or management process.

Waste management. The planning, coordination, and direction of those functions related to generation, handling, treatment, storage, transportation, and disposal of waste, as well as associated pollution prevention, surveillance, and maintenance activities.

Weapons laboratories. Colloquial term for the three DOE national laboratories—Los Alamos, Lawrence Livermore, and Sandia that are responsible for the design, development, and stewardship of U.S. nuclear weapons.

Wetland. Land or area exhibiting hydric (requiring considerable moisture) soil concentrations, saturated or inundated soil during some portion of the year, and plant species tolerant of such conditions.

Wind rose. A depiction of wind speed and direction frequency for a given period of time.